

**Louisiana Department of Environmental Quality
Office of Environmental Services**

**STATEMENT OF BASIS
For
Activity Number: PER20060007
Permit No. 0320-00002-V1**

**DeRidder Mill
Agency Interest No. 19933
Boise Packaging and Newsprint, LLC
DeRidder, Beauregard Parish, Louisiana**

I. APPLICANT

Company

Boise Packaging and Newsprint, LLC
Post Office Box 1060
DeRidder, Louisiana 70634

Facility

DeRidder Mill, 4200 Highway 190 West, DeRidder, Beauregard Parish, Louisiana
UTM Coordinates: 464.00 kilometers East and 3414.00 kilometers North, Zone 15

II. FACILITY AND CURRENT PERMIT STATUS

The DeRidder Mill converts raw wood to unbleached wood pulp which is then used as raw material to produce unbleached linerboard and communication-grade paper. Based on the process sequences, the mill is divided into sections, such as, the woodyard, pulp mill, powerhouse, causticizing, groundwood, thermo-mechanical, bleach plant, and paper machines.

At the pulp mill, wood chips are cooked in eight batch digesters to produce either linerboard pulp or semi bleach kraft (SBK) pulp which are sent to the paper machines area for linerboard or communication-grade paper production. Boise also has a thermo-mechanical pulp (TMP) mill and a groundwood production mill. Most of the pulp from the TMP mill and groundwood production mill along with the SBK pulp are used for the communication-grade paper production.

Black liquor recovered from the kraft pulp mill is concentrated and then fired in the recovery boiler of the power house. Green liquor from the smelt tank is causticized to produce white liquor. Lime mud from the causticizers is sent to the lime kiln for chemical recovery.

The recovery furnace, along with the bark-fired boilers No. 1 and No. 2 and the natural gas fired Package Boilers No. 3 and No. 4 provides steam for the mill operations. Excess steam is used for electric generation.

Currently, the mill operates under Permits PSD-LA-77(M-2), PSD-LA-687, and PSD-LA-695, and 0320-00002-V0, dated November 14, 2003.

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III. PROPOSED PERMIT / PROJECT INFORMATION

Proposed Permit

A permit application and Emission Inventory Questionnaire (EIQ) dated November 20, 2006 as well as additional information dated April 25, 2007 were submitted requesting a Part 70 operating permit modification.

A notice requesting public comment on the permit was published in *The Advocate*, Baton Rouge, and in the local newspaper. A copy of the notice was mailed to concerned citizens listed in the Office of Environmental Services Public Notice Mailing List. The application and proposed permit were submitted to the Beauregard Parish Library. The proposed permit was also submitted to US EPA Region 6. All comments will be considered prior to the final permit decision.

Project description

Permit 0320-00002-V0, dated November 14, 2003, authorized Boise Packaging and Newsprint, LLC to increase the Bark Boiler No. 2 firing rate to support the steam stripper operations as required by NESHAP Subpart S. The boiler was modified but the firing rate has never been reached the design rate. Emissions from the boiler increase above the permit limits. Boise requested a Part 70 operating permit modification to continue the boiler modification to bring the boiler firing rate to the design capacity and update emissions limits based on the actual data.

Permitted Air Emissions

Permitted emissions from the mill in tons per year are as follows:

Pollutant	Before	After	Change
PM ₁₀	2457.3	2264.42	- 193.88
SO ₂	678.2	711.63	+ 33.43
NO _x	2387.7	2601.83	+ 214.13
CO	3023.0	3220.71	+ 197.71
VOC	904.9	892.71	- 12.19
TRS	104.9	154.09	+ 49.19
H ₂ SO ₄	16.62	16.60	- 0.02
NH ₃	55.22	82.45	+ 27.23
HCl	24.64	432.16	+ 407.52
Cl ₂	-	6.30	-
ClO ₂	0.28	8.760	+ 8.480
Others	-	19.696	-

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Prevention of Significant Deterioration (PSD) Applicability

Emissions of PM₁₀, SO₂, and NO_x and CO from the project increase more than the PSD permit limits. A revision to the PSD-LA-77(M2) is required. These emissions increases do not exceed their respective significance levels; therefore, BACT is not required. However, NO_x and CO emissions increases are more than 50 % of their respective significance levels, then there is a reasonable possibility that the project may result in a significant emissions increase. Pre-project and post-project monitoring, record keeping, and reporting are required. Equipment at the mill is also subject to Permits PSD-LA-687 and PSD-LA-695.

Maximum Achievable Control Technology (MACT) requirements

The mill is a major source of toxic air pollutants (TAPs) pursuant to LAC 33:III.Chapter 51. TAPs emissions from the mill are controlled according to 40 CFR 63 Subparts S, and MM which are determined as MACT.

Air Modeling Analysis

TAPs emissions from the mill are not expected to cause or to contribute to any Ambient Air Standards (AAS) exceedances.

Dispersion Model Used: ISCST3

Pollutant	Time Period	Calculated Maximum Ground Level Concentration (µg/m ³)	NAAQS (µg/m ³)
PM ₁₀	24-hour	147.6	(150)
	Annual	14.2	(50)
SO ₂	3-hour	336.1	(1300)
	24-hour	120.8	(365)
	Annual	19.0	(80)
NO _x	Annual	19.2	(100)
CO	1-hour	2150	(40,000)
	8-hour	1400	(10,000)

General Condition XVII Activities

The facility will comply with the applicable General Condition XVII Activities emissions as required by the operating permit rule. However, General Condition XVII Activities are not subject to testing, monitoring, reporting or recordkeeping requirements. For a list of approved General Condition XVII Activities, refer to Section VIII of the proposed Part 70 permit.

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Insignificant Activities

All Insignificant Activities are authorized under LAC 33:III.501.B.5. For a list of approved Insignificant Activities, refer to Section IX of the proposed Part 70 permit.

Applicable Requirements

The applicability of the appropriate regulations is straightforward and provided in the Facility Specific Requirements Section of the proposed permit. Similarly, the Monitoring, Reporting and Recordkeeping necessary to demonstrate compliance with the applicable terms, conditions and standards are provided in the Facility Specific Requirements Section of the proposed permit.

IV. PERMIT SHIELDS

The Permit does not include any Permit Shields

V. PERIODIC MONITORING

The Monitoring, Reporting and Recordkeeping necessary to demonstrate compliance with the applicable terms, conditions and standards are provided in the Facility Specific Requirements Section of the proposed permit.

VI. APPLICABILITY AND EXEMPTIONS OF SELECTED SUBJECT ITEMS

The explanations for the non-applicability and exemptions of selected subject items are listed in Table XI of the proposed permit.

VII. STREAMLINED REQUIREMENTS

The Permit does not include any streamlined requirements.

VIII. GLOSSARY

Best Available Control Technologies (BACT) - An emissions limitation (including a visible emission standard) based on the maximum degree of reduction for each pollutant subject to regulation under this part which would be emitted from any proposed major stationary source or major modification which the administrative authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant.

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CAM - Compliance Assurance Monitoring rule – A federal air regulation under 40 CFR Part 64

Carbon Black - A black colloidal substance consisting wholly or principally of amorphous carbon and used to make pigments and ink.

Carbon Monoxide (CO) – (Carbon monoxide) a colorless, odorless gas produced by incomplete combustion of any carbonaceous (gasoline, natural gas, coal, oil, etc.) material.

Cooling Tower – A cooling system used in industry to cool hot water (by partial evaporation) before reusing it as a coolant.

Continuous Emission Monitoring System (CEMS) – The total combined equipment and systems required to continuously determine air contaminants and diluent gas concentrations and/or mass emission rate of a source effluent.

Cyclone – A control device that uses centrifugal force to separate particulate matter from the carrier gas stream.

Duct Burner – A device that combusts fuel and that is placed in the exhaust duct from another source (such as a stationary gas turbine, internal combustion engine, kiln, etc.) to allow the firing of additional fuel to heat the exhaust gases before the exhaust gases enter a steam generating unit.

Federally Enforceable Specific Condition - A federally enforceable specific condition written to limit the potential to Emit (PTE) of a source that is permanent, quantifiable, and practically enforceable. In order to meet these requirements, the draft permit containing the federally enforceable specific condition must be placed on public notice and include the following conditions:

- A clear statement of the operational limitation or condition which limits the source's potential to emit;
- Recordkeeping requirements related to the operational limitation or condition;
- A requirement that these records be made available for inspection by LDEQ personnel;
- A requirement to report for the previous calendar year.

Grandfathered Status- Those facilities that were under actual construction or operation as of June 19, 1969, the signature date of the original Clean Air Act. These facilities are not required to obtain a permit. Facilities that are subject to Part 70 (Title V) requirements lose grandfathered status and must apply for a permit.

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Heat Recovery Steam Generator (HRSG) – A steam generator that recovers exhaust heat from a gas turbine, and provides economizing and steam generation surfaces.

Hydrogen Sulfide (H₂S) - A colorless inflammable gas having the characteristic odor of rotten eggs, and found in many mineral springs. It is produced by the action of acids on metallic sulfides, and is an important chemical reagent.

Maximum Achievable Control Technology (MACT) - The maximum degree of reduction in emissions of each air pollutant subject to LAC 33:III.Chapter 51 (including a prohibition on such emissions, where achievable) that the administrative authority, upon review of submitted MACT compliance plans and other relevant information and taking into consideration the cost of achieving such emission reduction, as well as any non-air-quality health and environmental impacts and energy requirements, determines is achievable through application of measures, processes, methods, systems, or techniques.

NESHAP - National Emission Standards for Hazardous Air Pollutants –Air emission standards for specific types of facilities, as outlined in 40 CFR Parts 61 through 63

Nitrogen Oxides (NO_x) - Compounds whose molecules consists of nitrogen and oxygen.

Nonattainment New Source Review (NNSR) - A New Source Review permitting program for major sources in geographic areas that do not meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. Nonattainment NSR is designed to ensure that emissions associated with new or modified sources will be regulated with the goal of improving ambient air quality.

NSPS - New Source Performance Standards – Air emission standards for specific types of facilities, as outlined in 40 CFR Part 60

Organic Compound - Any compound of carbon and another element. Examples: Methane (CH₄), Ethane (C₂H₆), Carbon Disulfide (CS₂)

Part 70 Operating Permit- Also referred to as a Title V permit, required for major sources as defined in 40 CFR 70 and LAC 33:III.507. Major sources include, but are not limited to, sources which have the potential to emit: ≥ 10 tons per year of any toxic air pollutant; ≥ 25 tons of total toxic air pollutants; and ≥ 100 tons per year of regulated pollutants (unless regulated solely under 112(r) of the Clean Air Act) (25 tons per year for sources in non-attainment parishes).

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PM₁₀- Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by the method in Title 40, Code of Federal Regulations, Part 50, Appendix J.

Potential to Emit (PTE) - The maximum capacity of a stationary source to emit any air pollutant under its physical and operational design.

Prevention of Significant Deterioration (PSD) – A New Source Review permitting program for major sources in geographic areas that meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. PSD requirements are designed to ensure that the air quality in attainment areas will not degrade.